

**REMARKS**

Claim 20 is canceled without prejudice, claims 29 to 37 are added, and therefore claims 15 to 19, and 21 to 37 are currently pending in the present application.

In view of this response, it is respectfully submitted that all of the presently pending claims are allowable, and reconsideration is respectfully requested.

Applicant notes with appreciation the acknowledgment of the claim for foreign priority and the indication that all certified copies of the priority documents have been received.

With respect to paragraph one (1) of the Office Action, the Examiner indicated that the foreign references contained in the IDS filed on 6/20/06 have not been considered because copies of the cited foreign references have not been provided. Applicant notes that all of the foreign references cited in the 6/20/06 IDS were cited in the International Search Report of the parent PCT application, and the cited foreign references should have been provided to the USPTO by the International Searching Authority. However, since the cited foreign references have not been received by the USPTO, Applicant is submitting herewith copies of the cited foreign references, along with an English abstract where available.

With respect to paragraph three (3) of the Office Action, claims 15, 21 to 23, and 26 to 28 were rejected under 35 U.S.C. § 102(b) as anticipated by German Patent Publication No. DE 195 12 126 (“the Hekatron reference”).

As regards the anticipation rejections of the claims, to reject a claim under 35 U.S.C. § 102, the Office must demonstrate that each and every claim feature is identically described or contained in a single prior art reference. (*See Scripps Clinic & Research Foundation v. Genentech, Inc.*, 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991)). As explained herein, it is respectfully submitted that the Office Action does not meet this standard, for example, as to all of the features of the claims. Still further, not only must each of the claim features be identically described, an anticipatory reference must also enable a person having ordinary skill in the art to practice the claimed subject matter. (*See Akzo, N.V. v. U.S.I.T.C.*, 1 U.S.P.Q.2d 1241, 1245 (Fed. Cir. 1986)).

As further regards the anticipation rejections, to the extent that the Office Action may be relying on the inherency doctrine, it is respectfully submitted that to rely on inherency, the Office must provide a “basis in fact and/or technical reasoning to reasonably support the

determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied art.” (See M.P.E.P. § 2112; emphasis in original; and see *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Int’f. 1990)). Thus, the M.P.E.P. and the case law make clear that simply because a certain result or characteristic may occur in the prior art does not establish the inherency of that result or characteristic.

While the rejections may not be agreed with, to facilitate matters, claim 15 has been rewritten to provide that the IR radiation source emits IR radiation at an angle of incidence of less than 45° to the first mirrored area. Support for the added features of claim 15 may be found in the specification, for example, at page 4, lines 22 to 26; page 5, lines 11 to 14; page 7, lines 5 to 9; and Figures 1 and 6.

Claim 15, as presented, relates to a gas sensor for measuring at least one gas concentration for a vehicle climate control system, including, *inter alia*, the features of a substrate, an IR radiation source, an IR detector, a measurement chamber, a shielding device, and a reflective surface, in which *the IR radiation source emits IR radiation at an angle of incidence of less than 45° to the first mirrored area*.

The Hekatron reference does not identically disclose (or even suggest) all of the features of claim 15. In this regard, the Hekatron reference merely refers to a detector having a source 5, a measuring receiver 6, a reference receiver 7, and parabolic mirror units 10, 11, 12. However, nowhere does the Hekatron reference disclose that its source 5 emits radiation at an angle of incidence less than 45° to mirror unit 10. Indeed, it is plainly clear from Figure 6 of the Hekatron reference that some radiation from source 5 may strike mirror unit 10 at an angle much larger than 45°. Further, since the Hekatron reference merely describes parabolic mirror units, the source 5 and receivers 6,7 of the Hekatron reference must remain in particular fixed positions, for example, at each respective parabolic focus, in order to function properly. Therefore, the Hekatron reference does not identically disclose (or even suggest) the feature that *the IR radiation source emits IR radiation at an angle of incidence of less than 45° to the first mirrored area*, as provided for in the context of claim 15, as presented.

Accordingly, it is respectfully submitted that claim 15, as presented, is allowable, as are its dependent claims.

Withdrawal of the rejections of the claims is therefore respectfully requested.

With respect to paragraph seven (7) of the Office Action, claims 16 to 20, 24, and 25 were rejected under 35 U.S.C. § 103(a) as unpatentable over the Hekatron reference.

As an initial matter, claim 20 has been canceled herein without prejudice, thereby rendering moot the present rejection with respect to claim 20.

To reject a claim under 35 U.S.C. § 103(a), the Office bears the initial burden of presenting a *prima facie* case of obviousness. *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish *prima facie* obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed combination must be found in the prior art and not based on the application disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

Also, as clearly indicated by the Supreme Court in *KSR*, it is “important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements” in the manner claimed. *See KSR Int’l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727 (2007). In this regard, the Supreme Court further noted that “rejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Id.*, at 1396. Second, there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim features. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

As explained above, the Hekatron reference does not disclose (or even suggest) all of the features of claim 15, as presented. Claims 16 to 19, 24, and 25 ultimately depend from claim 15, as presented, and they are therefore allowable for essentially the same reasons provided above.

As further regards all of the obviousness rejections, any Official Notice is respectfully traversed to the extent that it is maintained and it is requested that the Examiner provide specific evidence to establish those assertions and/or contentions that may be supported by the Official Notices under 37 C.F.R. § 1.104(d)(2) or otherwise. In particular, it is respectfully requested that the Examiner provide an affidavit and/or that the Examiner provide published information concerning these assertions. This is because the § 103 rejections are apparently being based on assertions that draw on facts within the personal

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Reply to Office Action of May 24, 2010

knowledge of the Examiner, since no support was provided for these otherwise conclusory and unsupported assertions. (See also MPEP § 2144.03).

Withdrawal of the rejections of the claims is therefore respectfully requested.

In sum, claims 15 to 19, and 21 to 28 are allowable.

New claims 29 to 37 do not add new matter and are supported by the present application. Claims 29 to 37 depend from claim 15 and they are therefore allowable for the same reasons and for the further reason that they include combinations of features that are not disclosed or suggested by the applied references.

In sum, claims 15 to 19, and 21 to 37 are allowable.

#### **CONCLUSION**

It is therefore respectfully submitted that all of the presently pending claims are allowable. It is therefore respectfully requested that the rejections (and any objections) be withdrawn, since all issues raised have been addressed and obviated. An early and favorable action on the merits is therefore respectfully requested.


Respectfully submitted,

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